1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Kohuana Maricopa
Halyikwamai Halchidhoma

CHAPTER III

HOUSES

342 The Maricopa dwelling was dome-shaped, markedly flattened on top, and earth-covered. It was built on a central rectangular frame of posts linked by rafters, surrounded by a circular wall of poles bent over to be tied to the rafters, thatched, and dirt-covered. The construction was identical with that of the Pima [171] and Papago and different from the earth-covered, but rectangular, hip-roofed houses of Mohave and Yuma. Halchidhoma houses, and possibly those of the two other remnant groups, Kohuana and Halyikwamai, were identical with the Maricopa, at least since they joined the last on the Gila. Kutox insisted that 115 he had been told that still earlier the Halchidhoma houses on the 175 Colorado River had been of the same form. (He knew the rec- 342 tangular Mohave house.) But it is more than probable that he was mistaken since the known house forms of the lower Colorado (Mohave, Kamia, and Yuma) were all rectangular. Garcés in May 1774 remarked that the Halchidhoma "have better and larger houses than any I have seen" among the Yuma and on the Gila.[1]

177 342 The modern houses in the Maricopa community are for the most part of the Mexican jacal type: a rectangular structure having walls formed of posts at short intervals, with adobe between, held in place and protected against the wash of rain by horizontal ribs of the inner wood of the giant cactus nailed in place. The roof is flat, consisting of beams, sticks, brush and dirt (Pl. III, *A*, *C*). A solitary house of different construction was the home of the last surviving Kohuana in 1930 (Pl. III, *B*). It has the same wall posts and roof. The walls are thatched, however, with thick layers of arrowweed, held in place by horizontal willow branches inside and out, tied together through the thatch at intervals. This was said to be in imitation of the Mexicans, but the form is known to Pima and [171] Papago.[2] There are now no houses of the ancient type.

34 Anciently house constructions included the flat-domed, earth-covered dwelling; the meeting house, which was but a larger

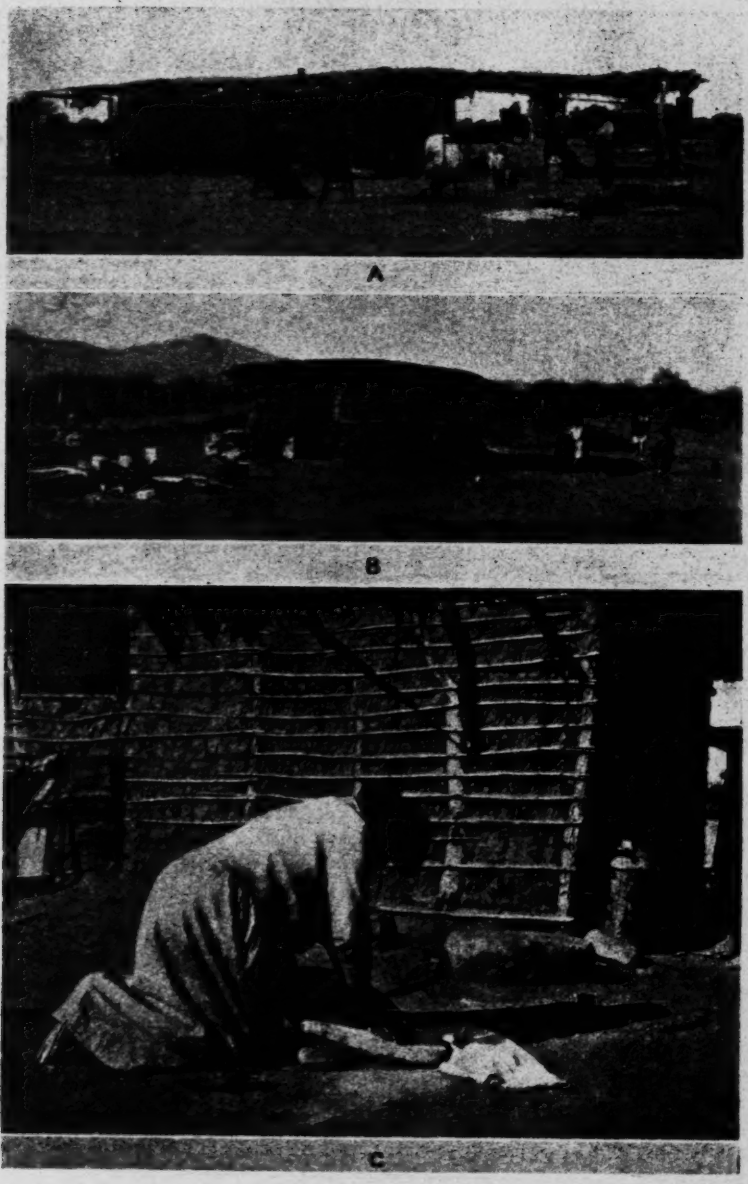
[1] Bolton, *Anza's California Expeditions*, II, 386.

[2] Kissell, *Basketry of the Papago and Pima*, p. 147.

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa

PLATE III

177
342



A

B

C

[252]
[516]
[412]

MODERN MARICOPA HOUSES AND WOMAN GRINDING

[p. 82 A]

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa

edition of the dwelling; an open-sided, flat-roofed shade; a small structure resembling a gable roof set directly on the ground, built as needed for a storage house, for purification rites, for a girl's puberty rite, and as a menstrual hut. A small hemispherical sweat lodge was also built. Sometimes a temporary kitchen was made by erecting a screen of weeds to windward of the cooking place.

Housebuilding was man's work alone, whether a dwelling, storehouse, or meeting house: the women did not assist. A man was helped by his male friends and relatives in the construction of his dwelling. In building a meeting house, all the men of the village were engaged and built it in a day.

Dwellings stood indefinitely, until some one of the inmates died, when they were torn down and burned. This also happened on the infrequent occasions when relatives who had married were mourned as dead. A new house was erected elsewhere, so that the community was constantly crawling away from its original location. So great was the decimation from disease and warfare during the past century, that the shifting went on with some rapidity despite the localizing ties of available water supply and tillage. The movement may have been somewhat less in earlier times, but there is no doubt that the habit of shifting the locus is old and ingrained. Houses did not suffer much from the elements; rainfall is slight and confined largely to the spring, snow practically never falls. The dirt covering of the house needs no renewal; at most, it must be patched here and there.

The size of the dwelling naturally depended on the number of inmates it was intended to house. An average dwelling was about eighteen to twenty feet in diameter, larger houses perhaps twenty-five feet: Bartlett (1852) says fifteen to twenty-five feet.[3] It was built on level ground, no excavation being made.

For the ordinary dwelling, four cottonwood posts were set in the ground at the corners of a square, measuring nine or ten feet. These stood as high as a man could reach, about seven or eight feet, so that he could work at the ridge. (It must be remembered that these people are quite tall.) Yet Bartlett wrote, "These

[3] Bartlett, *Personal Narrative*, II, 234.

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa

342 habitations vary in height from five to seven feet; so that in many of them one cannot stand erect." The four main posts were stout, about a foot in diameter, because of the weight of the dirt covering, and were provided at the upper end with a crotch

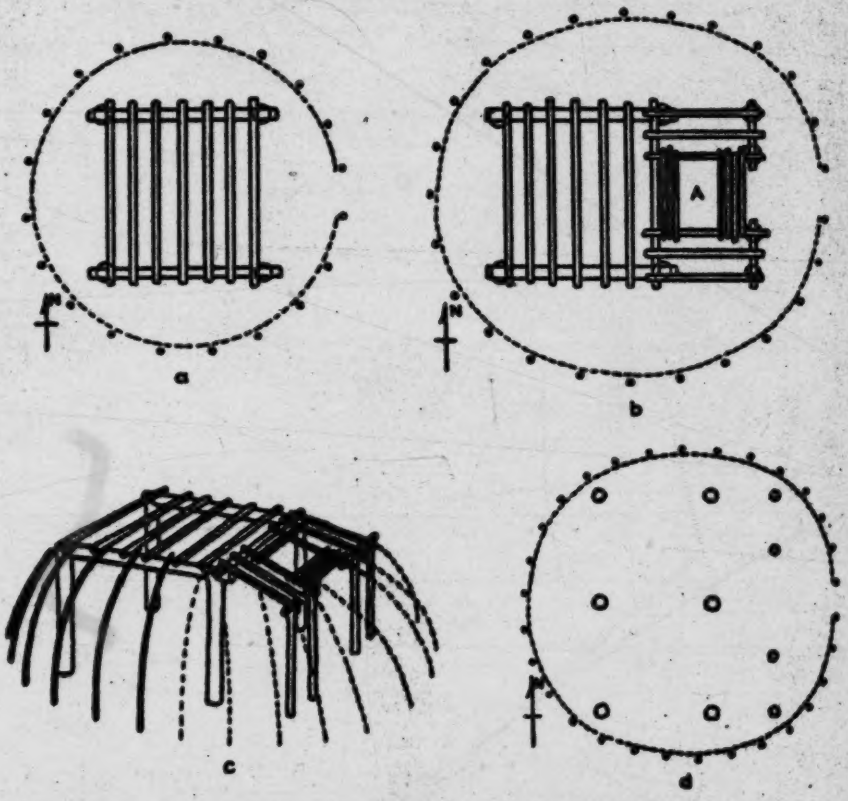


FIG. 6.—Diagrams of house frames (*a*, dwelling; *b*, *c*, larger dwelling; *d*, meeting house).

formed by short branches or a notch cut into the top. The posts were connected in pairs by longitudinal stringers of almost the same diameter placed in their crotches. Transverse rafters were laid in those to complete a rectangular grid supported on the tops of the posts (Fig. 6, *a*). Around this central frame a row of flexible poles was set in a circle to form the wall. These were willows, four or five inches in diameter where they were set into

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa
Halchidhoma

the ground, with their tips bent over to the rectangle formed by the roof beams, where they were lashed in place. Bartlett adds that they were further united at the center.[4] A space for entrance was left on the eastern side. The wall had a clearance of about three feet from the corner posts, five feet at the mid-points between them. 342

Larger houses were sometimes made by setting the circular wall at a greater distance from the central frame and using longer willow poles. They were more commonly made by increasing the size of the frame, keeping the wall at the same distance from it. For this purpose, four auxiliary posts were placed in front of the central four (i.e., to the east), arranged in pairs on either hand as viewed from the doorway (Figs. 6, *b*, *c*). These four were somewhat shorter than the central four, about five feet high, and stood perhaps six feet in front of the easterly pair of main posts. They were connected in pairs by short beams in their crotches; short rafters were laid longitudinally between these beams and the eastern transverse beam of the main frame, and the grid completed with sticks laid transversely between these rafters, leaving, however, an opening (*A*) for a smoke vent. The wall was said to pass three feet in front of these auxiliary posts. Since the frame was thus longer than wide, it appears that the house may have been oval in ground plan, but the information is not decisive. At any rate, these houses always approached circles and were never squarish with rounded corners.

The Halchidhoma informant Kutox gave a somewhat different picture of the framework. In the first place, the ordinary dwelling, according to him, was somewhat larger than that described above; the central frame measuring sixteen feet on the side. It was built of nine main posts, set in parallel rows of three; the posts spaced about a fathom from each other in both directions. The middle row was slightly higher than those to north and south: seven or eight feet for the middle row, six feet for the sides. Longitudinal stringers were placed on each row of posts so as to lie east and west, like those already described. The transverse rafters were twenty-four in number, twelve to the side, reaching from the central line of stringers to those at the side. This resulted in a very low gable at the center of the roof; so low as to be scarcely recognizable. He was contradicted by three individuals as well-informed on house building as he. (Such houses were in use within the present century.) None of them had ever seen a dwelling with nine 115 342

[4] *Ibid.*, p. 233.

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa
Halchidhoma

115 main posts nor even a meeting house, which, being larger, might have called for
●342 such an arrangement. It was suggested that he had confused the construction with that of the shade. This is quite likely, for he was, in fact, using a shade with its conventional nine posts for demonstration. There is also a possibility, though slight, that the Maricopa and Halchidhoma houses may have differed in this par-
[171] ticular. Further, the gable roof he described resembled that of Mohave-Yuma houses. Bartlett stated that for the small houses four posts were used, nine for "larger dwellings"; the latter may have been the meeting houses.

342 The ground plan of a house was never laid out by accurate measurement, neither the distance between posts nor the circumference. At most one of the long posts was laid on its side to give the distance between the corner posts.

Before the house was thatched, willow poles were bound horizontally around the wall poles on the outside. These could not have been more than a foot or a foot and a half apart, since a high house was said to have six or eight such ribs. The walls were thatched with green arrowweeds placed in two rows. The lower row was of shorter weeds than the upper. Both rows were placed so that the butt ends were uppermost. Horizontal willow ribs were tied outside of this thatch to hold it in place, the withes passing through the thatch to the inner ribs and vertical wall poles. For the roof, lengths of arrowweed stem were laid longitudinally on the transversely set rafters. (These were broken to length under the foot.) The green leafy parts of the arrowweeds were then piled over these, but lying transversely. These had the stem-end in (in Kutox's house, nearest the ridge) so that the tips protruding beyond the "eaves" would hang over the upper part of the wall. The arrowweed layer in all was six inches deep. The roof was then covered with dirt to as much again, so that the whole covering was a good foot thick. Dirt was banked all around the periphery of the house and as far up the wall as its curvature would permit. It was patted firmly in place. To hold the dirt on the upper slope, bundles of arrowweed were tied horizontally over the thatch all the way around to give a footing for the dirt cover. These were not only tied with willow twigs, but were propped on bundles of arrowweeds set vertically to help support the great weight. The dirt available at most house sites was adobe, which from its clayey nature was admirably adapted

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa

to set on the sloping walls. In localities where sand blew about, the houses soon became drifted over and resembled sand dunes. 342

The entrance invariably faced the east. It made no difference what was the nature of the terrain about the house site, this was its invariable orientation. This, rationalization had it, was because the culture hero had built the first house in this fashion. [773] As a matter of fact, as Russell remarks of the Pima living but a few miles away in the same sandy waste: [132]

> A more practical motive for placing the doors on the east side is to avoid the southwest winds which blow in the afternoon during nearly the entire year and which are especially strong during the month of March. The wind usually begins to blow at about 10 in the morning and increases to a velocity of 10 miles an hour by mid-afternoon, after which it decreases until midnight.[1]

So strong is the old habit of orientation that of sixteen present-day houses counted on the reservation (mostly of the jacal type), only four faced other than due east, and of these four, three are modern frame houses.

The doorway was narrow and low; so low that one had to stoop to enter (about three feet high or little more). As most houses, at least the smaller ones, had no smoke-hole, this was the only egress for smoke. They must have been densely filled with smoke except for a few feet above the floor. [354]

The doorway of most houses was left unprotected, but those who were more particular built a sort of porch. Two forked posts were erected immediately in front of the entrance but on either side, and a stringer was laid between them. Bundles of arrow-weeds were placed from this stringer to the sloping wall above the entrance and others were set upright on each side between post and wall. Dirt was spread on top of this entry.

A door was made by hanging a thick willow bark or rabbit skin blanket in the opening. It was let down at night and in the morning thrown back over the house. More recently a door was made of parallel bundles of wheat straw lashed to willow poles at each end and in the middle. Not every house had a door. [287] [281]

The interior arrangement of the house was simple: there were neither partitions nor furniture. The fire was in the center, un- 352 [354]

[1] *Pima Indians*, p. 154.

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa

352 [354] 513 confined by any sort of built fireplace. Sleeping places were on each side, marked by bundles of coarsely woven blankets of cotton to serve as mattress and covering. The parents of the household slept together at one side, with their smaller children between them to prevent them getting in the fire. Older children and other relatives slept on the opposite side. It was said that parents always slept on the north side, but in at least one household described in detail, they occupied the opposite side. Guests [574] were placed in the best sleeping place, the rear of the house (the west side), so that they might have the fire between them and [354] the doorway.[6] A big fire was built late in the afternoon to warm up the house for the night. The beds were arranged so that they [721] always slept with their heads to the east. Men kept their bows and arrows at their heads on stormy nights for then the enemy could be expected. Men slept with their breechclouts on; women [291] took off their willow skirts and wore only the little under-aprons.

[522] They tell as a joke of a man who ran out at a false alarm of the enemy. His wife grabbed for her skirt in the dark, but caught hold of the fringe of his breechclout by mistake, and tore it from him. He ran out naked with his bow.

● 342 The several parts of the interior were not named. Someone sent to find something in the house would be told he could locate it in "the middle" (vuto") or "east wall," "south wall," etc. The names of parts of the construction are not altogether peculiar to a house:

[192] ava', house
wŭlpo", post (wŭlpo" tŭkuvɯ', middle post; wŭlpo" kwĭnĭpaл'a, side post, of a house having three rows of posts)
wucwe'лĭ, wall (of a house only); cŭvi'k, vertical wall pole; itcâmi'ałs, horizontal rib; tcâpĕtu'm, thatch
mai', "top, high," roof
de'ᵗvâm, dirt layer (but dirt is âma't)
vuya', doorway; vuya'pŭk, entry (There is no specific name for the door-flap itself)

343 Probably every house was provided with a flat-roofed shade (matᵃk,iă'lᵃ): every existing house has one. This was sometimes built against the front (east side) of the dwelling, where two posts supported the outer edge like a porch roof, but it was usu-

[6] For the arrangements of an actual family, see p. 226.

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa

ally at a little distance to the southeast. This resembled the central frame of the dwelling, was of the same height but perhaps greater area, and invariably was framed on nine posts, set three in a row. The roof was covered with arrowweeds but not dirt. Sometimes willow branches were placed vertically on the west side against the sunshine, but all the sides were never enclosed. This structure furnished shade in summer: it never served as a dwelling. 343

Beneath the shade stood several mesquite posts supporting large jars for the storage of water. These stood about thirty inches high and, like those of the Pima and Papago,[1] had three short branches to hold the jar. The mouths of these jars were usually unprotected but sometimes covered by Pima baskets. [415] [312] [171]

Travelling parties never built houses of any description, perhaps because they were never far from home and even then within the enemy's striking distance. Further, families ordinarily left home to gather mesquite, etc., only in the summer when shade, rather than any other protection, was needed. They camped under the overhanging boughs of big trees. The White Mountain Apache custom of enclosing the camp in a ring of brush to keep out flying sand was unknown. 484 342

Each dwelling was also provided with a single storehouse (va'na'RÀ). There was no conventional place for its location: it stood in front, rear, or at the side of the house indifferently. In form it was simply a gable roof set over a pit. This pit was oval, six to eight feet long, and almost knee deep. A post was set up in the pit near each end, a ridge pole connecting the pair. Willow branches were stuck into the ground around the brink of the pit so that they would lean against the ridge. (They were not tied to it.) Other willows were lashed horizontally to these to form two ribs around sides and end, one above the other. Arrowweeds were then placed over the frame as carefully as the thatch of the dwelling. There were three rows of thatch; the first, stem end up, all around at the base; another, also stem up, at a higher level; the third row, stem end down, lapped over the ridge. No outer ribs were needed to hold this thatch in place, since the house was 343

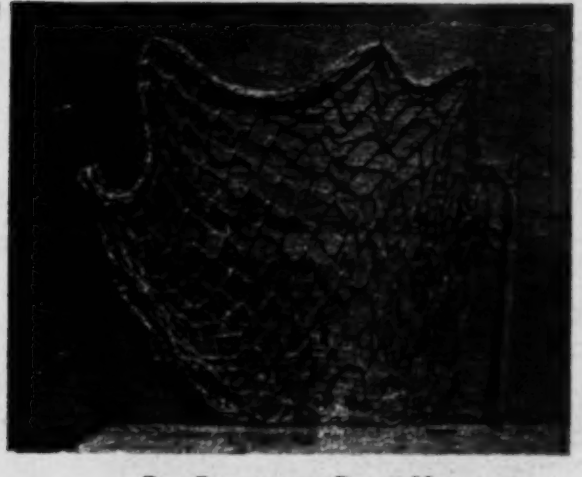
[1] Russell, *Pima Indians*, p. 127; Dorsey, *Indians of the Southwest*, p. 203.

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa

PLATE XI

224
411
[302]
[342]

[386]



BOW POSITION AND RABBIT-NET

[FACING p. 131]

2:Bartlett G-5 (1850-1853) 1854
NT15 River Yumans NT15
Pima NU29

most luxuriant crops. At the western end of the valley is a rich tract of grass, where we had our encampment. This is a mile or more from the nearest village of the Coco-Maricopas. On the northern side of the river there is less bottom-land, and the irrigation is more difficult. There are a few cultivated spots here; but it is too much exposed to the attacks of their enemies for either tribe to reside upon it.

The villages consist of groups of from twenty to fifty habitations, surrounded by gardens and cultivated fields, intersected in every direction by acequias, which lead the water from the Gila. Their mode of irrigation is the same as that practised in various parts of Mexico. Their cultivated fields are generally fenced with crooked stakes, wattled with brush, the thorny mezquit predominating; although I noticed large patches of wheat, a long distance from any village, that were not inclosed.

Their houses are built with stakes, poles, corn-shucks, and straw. For the small houses, four upright stakes forked at one end are inserted in the ground. For the larger dwellings nine are used; three on each side, and one in the centre. Across the tops of these, other sticks are laid to support the roof. Next a row of poles is inserted in the ground, a few feet outside the larger upright stakes, bent over towards the centre and fastened to the horizontal beams. These are then united in the centre, forming a slightly rounded top. Smaller poles are now horizontally interlaced with the upright ones, and between them straw, corn-shucks, or rushes are interwoven in large masses, so as to shed the rain and protect them from the intense heat of the

2:Bartlett G-5 (1850-1853) 1854
NT15 River Yumans NT15
Pima N429

P RY 342 sun; some are then plastered over with mud. An opening for a door is left, about three feet high, to creep in at. These habitations vary in height from five to seven feet; so that in many of them one cannot stand erect. In fact they are chiefly used to sit and sleep in. In diameter they are from fifteen to twenty-five feet. In the most westerly village of the Coco-Maricopas, from which the annexed sketch was taken, the wigwams are wholly plastered with mud. Their cooking is done out of doors, where the greater portion of their time is passed, beneath a kind of shed or bower attached to the wigwams. This is open on all sides, and merely protected from the sun overhead. P RY [343] Beneath these bowers the people are generally seen engaged in their household occupations, only resorting to their better protected abodes in cool or rainy weather. The accompanying sketch shows the manner of erecting these wigwams.

Mode of constructing Wigwams.

P RY 343 Besides the dwelling-places, each family is provided with a store-house or granary. These are built like the Mexican *jakals*, i. e., with stakes placed close together and about eight or nine feet high. They are better structures than the dwellings, and are probably made more open, in order to give a free circulation of

3: Whited G-5 (1890) 1894 NT15 River Yumans NT15
Maricopa
Pima NLL 29

P R 135 these metals exist within the limits of the several reservations. A few adventurers claim that if the Indian title to the land could be extinguished enterprising miners would soon develop paying quantities of the precious metals, but such statements need verification.

P R 764 CUSTOMS AND RELIGION.—Should one of the tribe die, it was formerly the practice to burn the tent, hunt and kill all the animals owned by the deceased, and destroy all his property; but such practices have been abandoned within the past 15 years. Their mode of burial now is to dig a grave 5 or 6 feet in depth, then dig a vault at one side large enough to receive the body, fill the grave, and cover it with poles or brush, probably to prevent the violation of sepulture by the coyotes. Several such Indian burying grounds may now be seen on the Gila River reservation.

P R 797 Viewed from a religious standpoint, a steady advance has been made within the past 15 years, though the progress has been slow. The Presbyterian church has erected a small adobe chapel at this agency, in which Sunday school and other services are held every week and are well attended. In addition, a small adobe chapel has been erected and partially completed at Blackwater village, about 12 miles east of the agency, but within the limits of the reservation, with a church membership of 22, about equally divided between the sexes. The Pimas have 2 church buildings, valued at $2,000.

P R 177 262 342 PROGRESS.—The material and economic progress made by the Pima and Maricopa tribes within the past 15 years is quite noticeable. Formerly all carcasses of horses and mules which fell on the great road stretching along the south bank of the Gila river, through what is now the Pima reservation, were quickly appropriated by the Indians and used as food. Their dwellings were then miserable huts, built of brush and weeds; now there are nearly 100 adobe houses, and a large number of their huts are built of willows and sticks, well plastered on the sides and roof with adobe, those among them who can do so building houses in the Mexican style. According to a count made July 1, 1890, out of 500 dwellings of all kinds 90 were adobe houses.

P R 177 648 241 The agent is encouraging improvements by issuing a new wagon to each Indian who builds a house, imposing the condition that the wagon shall be properly cared for and housed. On the fulfillment of certain other conditions he issues a plow or harrow, thus encouraging improved methods of farming. The Indians quite readily avail themselves of these opportunities, and since September 1, 1890, there have been issued 22 wagons, 12 sets of harness, 30 plows, 200 shovels, 200 hoes, 50 iron rakes, 100 axes, 100 sickles, and 40 swamp hooks. The Pimas are self-supporting, receiving no rations or annuities and no gifts from the government except farming tools, and their desire for these implements shows the progress that is being made in agriculture among them.

P R 177 291 [822] [302] In dress great progress has been made in adopting that of the whites. Probably one-half of the men wear shirts, pants, shoes, and hats; one-third go barefoot; rarely one may be seen at his cabin without covering to the legs. Some of the children wear very little clothing. The women wear no shoes in warm weather. A scanty skirt, with blouse waist, suffices for their covering, except that they wear a shawl, or a cheap substitute for one, drawn around their shoulders without folds and falling to the knees. No covering for the head is worn except when the shawl is drawn over it. Red is the prevailing color of the dress; the brighter it is the more desirable it will be. The hair is parted in the middle and combed back, and is usually worn long by both sexes, but the men have been encouraged to cut their hair short and wear hats, and efforts in this direction are meeting with some success.

P R 177 273 548 [519] [648] MORALS OF THE PIMAS AND MARICOPAS.—Drunkenness, prostitution, theft, and gambling may be classed as the prevailing vices of these Indians. According to the best authority attainable drunkenness is on the increase among the Pimas. The cause of this increase may be traced to contact with the whites, who sell them intoxicants. They manufacture a cheap fermented liquor from corn or cactus fruit and indulge in drinking at their dances; but drinking does not appear to be more common with them than among the whites, and, indeed, one has but to stand by any of the many open bars of the territory to become convinced that drinking prevails extensively among the superior race. Cases of prostitution are too common, but do not seem to be increasing. Instances of brawls and quarrels are not frequent unless some of the parties are drunk. Fifty Indian boys attending school will pursue boisterous games day after day and never engage in a quarrel or a fight. The Pimas as a tribe are peaceful, and claim that they never warred with the whites, but were obliged to take up the hatchet against their ancient enemies, the Apaches, in order to preserve their existence, and having quieted them, they returned to their peaceful avocations.

P R 164 DISEASES.—The tribe is more or less tainted with venereal diseases. The Indians are scattered over the reservation, and the agency physician attends to but a small portion of those who are sick. No reliable statistics of diseases and deaths have ever been collected, and it is impossible to determine with any great degree of accuracy the proportion of deaths resulting from the several diseases or accidents. The agency physician reports the diseases as scrofula, consumption, conjunctivitis, and syphilis. Rheumatism prevails to some extent, but owing to the mildness of the climate it is not as prevalent as among tribes farther north. Scrofulous swellings on the neck and scrofulous ulcers are often seen. One old resident thinks that from 10 to 20 per cent of the deaths are due to consumption. The physician claims that a large majority of the cases of scrofula and conjunctivitis can be traced to a syphilitic taint.

P R [755] The Indians can not be relied upon to administer medicines furnished and prescribed by the physician. A large majority of them lack faith in prescribed remedies. They prefer the singing and howling of the medicine man.